

Serial No. 10/006,698
August 12, 2003
Reply to the Office Action dated May 15, 2003
Page 5 of 7

REMARKS/ARGUMENTS

Claims 1-10 are pending in this application. By this Amendment, Applicants AMEND claim 1.

The Examiner indicated in the Office Action Summary, Form PTO-326, that claims 11-21 were withdrawn from consideration. However, claims 11-21 were canceled in the previous Amendment, dated March 18, 2003.

Claims 1-10 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Takahashi et al. (U.S. 6,204,593) or Kugou et al. (U.S. 5,596,244) in view of Kim et al. (U.S. 6,087,763), Kim et al. (U.S. 5,982,076) or Yoshio et al. (U.S. 6,307,305) or vice versa. Applicants have assumed that the Examiner intended to use Takahashi et al. (U.S. 6,204,593) and not Takahashi (U.S. 5,155,570) in his rejection of the claims because **Fig. 1A** of Takahashi et al. (U.S. 6,204,593) teaches the use of round wire and it appears Takahashi (U.S. 5,155,570) teaches the use of only a rectangular lead wire. Applicants respectfully traverse the rejection of claims 1-10.

Claim 1 has been amended to recite:

"An electronic component comprising:
a piezoelectric element having electrodes at two end portions thereof; and
at least a pair of lead terminals having cup-shaped holder portions arranged to hold both end portions of the piezoelectric element; and
a conductive joining material arranged such that the cup-shaped holder portions and the electrodes disposed at both end portions of the piezoelectric element are electrically and mechanically connected by the conductive joining material; wherein
each of the at least a pair of lead terminals is defined by a conductive wire having a diameter;
one end portion of each of the at least a pair of lead terminals includes a portion that is bent at a bending point outward at an angle of about 90 degrees with respect to a lead portion of a respective one of said at least a pair of lead terminals;
a flat portion is defined by a press extended portion on a tip side from the bending point so as to be extended substantially parallel to the lead portion of each of the pair of lead terminals;
the flat portion includes a portion that is bent inwardly with respect

Serial No. 10/006,698

August 12, 2003

Reply to the Office Action dated May 15, 2003

Page 6 of 7

to the portion that is bent outward at an angle of about 90 degrees to define the cup-shaped holder portion;

the flat portion has a thickness that is less than about 50% of the diameter of the conductive wire; and

each of the at least a pair of lead terminals includes a slightly rolled portion having a diameter greater than the diameter of the conductive wire.” (emphasis added)

Applicants' claim 1 recites the feature of “each of the at least a pair of lead terminals includes a slightly rolled portion having a diameter greater than the diameter of the conductive wire.” With the improved features of claim 1, Applicants have been able to prevent solder and soldering flux from entering the inside of the packaging resin 6 when the electronic component is mounted (see, for example, the first full paragraph on page 12 of the Specification).

Applicants have amended claim 1 to recite the feature of “each of the at least a pair of lead terminals includes a slightly rolled portion having a diameter greater than the diameter of the conductive wire.” This feature is not taught or suggested by Takahashi et al., Kugou et al., Kim et al. (U.S. 6,087,763), Kim et al. (U.S. 5,982,076), and Yoshio et al.

First, as noted by the Examiner in the paragraph bridging pages 2 and 3, Kim et al. (U.S. 6,087,763) and Kim et al. (U.S. 5,982,076) teach the use of rectangular lead wire. Thus, Kim et al. (U.S. 6,087,763) and Kim et al. (U.S. 5,982,076) clearly fails to teach or suggest the feature of “each of the at least a pair of lead terminals includes a slightly rolled portion having a diameter greater than the diameter of the conductive wire” as recited in Applicants' claim 1.

Second, Takahashi et al., Kugou et al., and Yoshio et al. teach the use of a round wire with diameter. However, none of Takahashi et al., Kugou et al., and Yoshio et al. teach or suggest the feature of “each of the at least a pair of lead terminals includes a slightly rolled portion having a diameter greater than the diameter of the conductive wire” as recited in Applicants' claim 1.

ORIGINAL

Serial No. 10/006,698
August 12, 2003
Reply to the Office Action dated May 15, 2003
Page 7 of 7

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1.

Accordingly, Applicants respectfully submit that Takahashi et al., Kugou et al., Kim et al. (U.S. 6,087,763), Kim et al. (U.S. 5,982,076), and Yoshio et al., applied alone or in combination, fail to teach or suggest the unique combination and arrangement of elements recited in claim 1 of the present application. Claims 2-10 depend upon claim 1 and are therefore allowable for at least the reasons that claim 1 is allowable.

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

Date: August 12, 2003


Attorneys for Applicants

Joseph R. Keating
Registration No. 37,368

Christopher A. Bennett
Registration No. 46,710

KEATING & BENNETT LLP
10400 Eaton Place, Suite 312
Fairfax, VA 22030
Telephone: (703) 385-5200
Facsimile: (703) 385-5080

FAX RECEIVED

AUG 12 2003

TECHNOLOGY CENTER 2800